REMARKS

The Examiner is thanked for the performance of a thorough search.

Claims 1, 4-12, 17, 20-28, 33-34, and 36-38 have been amended. Claims 39-40 have been added. No claims have been canceled. Hence, Claims 1, 4-12, 17, 20-28, and 33-40 are pending in the present application.

Each issue raised in the final Office Action mailed August 22, 2007 is addressed hereinafter.

I.   ISSUES RELATING TO THE PRIOR ART

A.   INDEPENDENT CLAIM 1

Claim 1 was rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over Vedula et al., U.S. Patent No. 6,823,495 ("VEDULA") in view of CHAU et al., U.S. Patent No. 6,643,633 ("CHAU").

Among other features, Claim 1 comprises the feature of:

…;
using said mapping scheme to perform a single transformation that moves said
        XML document directly into said relational database without materializing
        the entire XML document separate from said XML document and said
        relational database during said transformation;
… .

It is respectfully submitted that the above feature of Claim 1 is not shown or suggested by VEDULA and CHAU.

The Office Action asserts that the above feature of Claim 1 is described in CHAU. This assertion is incorrect.

In col. 77, lines 20-45, CHAU describes a technique for storing fragmented XML data into a relational database. Specifically, in col. 77, lines 30-34, CHAU describes that an incoming XML document, which is to be stored into the relational database, is parsed and **converted into** a Document Object Model (DOM) tree. A Document Access Definition (DAD) is also parsed and

converted into a separate DOM tree. Then, the CHAU technique works on **both** DOM trees to map data from the DOM tree of the XML document to columns in relational tables according to the DAD DOM tree. (CHAU, col. 77, lines 35-39.) Thus, CHAU explicitly describes that the XML document is stored into the relational database by performing **at least two** transformations - one transformation to convert the XML document into a DOM tree, and another transformation to store the data from the DOM tree into relational tables. Further, by describing that the XML document is converted into a DOM tree, CHAU indicates that the **entire** XML document is materialized outside of, and separate from, the relational database during the process of storing the XML document into the relational database.

In contrast, Claim 1 includes the feature of using a mapping scheme to perform a **single** transformation that moves an XML document **directly into** a relational database **without materializing the entire** XML document separate from the XML document and the relational database during said transformation. Thus, in contrast to CHAU, this feature of Claim 1 indicates that a **single** transformation moves an XML document **directly into** a relational database **without materializing the entire XML document** during said single transformation.

The differences between Claim 1 and CHAU are significant. First, materializing an XML document as a DOM tree, as described in CHAU, is an operation that uses a large amount of computing resources such as memory and CPU cycles; for large XML documents such operation would be slow or could not even be performed because of insufficient memory. Second, CHAU uses at least two data transformations when storing the XML document into a relational database; using multiple data transformations, however, also requires more computing resources. In contrast, Claim 1 provides for performing a single transformation to move an XML document directly into a relational database without materializing the entire XML document during said single transformation.

For these reasons, VEDULA and CHAU whether taken alone or in combination do not describe or suggest all features of Claim 1. Thus, it is respectfully submitted that Claim 1 is patentable under 35 U.S.C. § 103(a) over VEDULA in view of CHAU. Reconsideration and withdrawal of the rejection of Claim 1 is respectfully requested.

B.   DEPENDENT CLAIMS 4-12, 17, 20-28, AND 33-38

Claims 4-12, 17, 20-28, and 33-38 were rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over VEDULA in view of CHAU.

Each of Claims 4-12, 17, 20-28, and 33-38 depends directly or indirectly from independent Claim 1, and therefore includes each and every feature of the independent base claim. Thus, each of Claims 4-12, 17, 20-28, and 33-38 is allowable for the reasons given above for Claim 1. In addition, each of Claims 4-12, 17, 20-28, and 33-38 introduces one or more additional features that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those features is not included at this time. Therefore, it is respectfully submitted that Claims 4-12, 17, 20-28, and 33-38 are allowable for at least the reasons given above with respect to Claim 1. Reconsideration and withdrawal of the rejections of Claims 4-12, 17, 20-28, and 33-38 is respectfully requested.

C.   NEW CLAIMS 39-40

Each of new Claims 39-40 depends directly or indirectly from independent Claim1, and thus includes each and every feature of the independent base claim. Thus, each of Claims 39-40 is allowable for at least the reasons given above for Claim 1. In addition, each of Claims 39-40 introduces one or more additional features that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those features is not included at this time. Therefore, it is respectfully

submitted that Claims 39-40 are allowable for the reasons given above with respect to Claim 1.

Consideration and allowance of Claims 39-40 is respectfully requested.

II.   CONCLUSION

The Applicant believes that all issues raised in the final Office Action have been addressed. Further, for the reasons set forth above, the Applicant respectfully submits that allowance of the pending claims is appropriate. Entry of the RCE filed concurrently herewith, and reconsideration of the present application is respectfully requested in light of the amendments and remarks herein.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

A petition for extension of time, to the extent necessary to make this reply timely filed, is hereby made. If applicable, a law firms check for the petition for extension of time fee is enclosed herewith. If any applicable fee is missing or insufficient, throughout the pendency of this application, the Commissioner is hereby authorized to charge any applicable fees and to credit any overpayments to our Deposit Account No. 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Dated: December 21, 2007

/StoychoDDraganoff#56181/
Stoycho D. Draganoff
Reg. No. 56,181

2055 Gateway Place, Suite 550
San Jose, California   95110-1089
Telephone No.: (408) 414-1080 ext. 208
Facsimile No.: (408) 414-1076